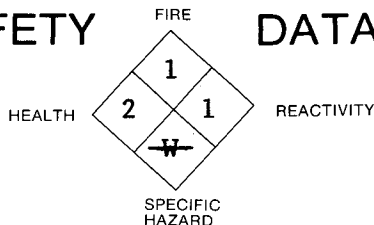


Sealed Air Corporation

Old Sherman Tnpk., Danbury, CT 06810, (203) 792-2360

MATERIAL SAFETY

DATA SHEET



DPM 6060

ISSUE DATE Nov. 1985

SUPERSEDES Sept. 1984
ISSUE OF

EMERGENCY TELEPHONE NO:
(203) 792-2360

CHEMTREC (For spill, leak, fire, exposure or accident) 1-800-424-9300

PRODUCT NAME

INSTAPAK® COMPONENT "A" + "B"

CHEMICAL FAMILY

Aromatic Isocyanates

CHEMICAL NAME & SYNONYMS

Polymethylene Polyphenylisocyanate

CHEMICAL FORMULA

N.A.

TRADE NAME & SYNONYMS

Crude MDI

HAZARDOUS INGREDIENTS

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS OR GASES	CAS #	%	CURRENT TLV
4,4' Diphenylmethane Diisocyanate (MDI)	101-68-8	~50	0.02 ppm
Higher molecular weight oligomers of MDI	9016-87-9	~50	N.E.

PHYSICAL DATA

APPEARANCE (SOLID, LIQUID, GAS)	MOLECULAR WEIGHT	MELT POINT	SPECIFIC GRAVITY
Liquid	Approx. 350	N.A.	1.24 @ 25°C
VAPOR DENSITY (AIR: 1)	COLOR	BULK DENSITY	BOILING POINT
8.5	Dark Brown	10.3 lbs./gal.	625°F @ 760 mmHg
VAPOR PRESSURE	SOLUBILITY (WATER)	ODOR	% VOLATILE BY VOLUME
<10 ⁻⁴ mmHg @ 25°C	Reacts with water	Slightly Aromatic	Nil

FIRE & EXPLOSION DATA

FLASH POINT °F (METHOD USED)	FLAMMABLE LIMIT	EXTINGUISHING MEDIA
390°F P.M.C.C.	Lel N.E. Uel N.E.	CO ₂ , Chemical foam, dry chemical, water spray

SPECIAL FIRE FIGHTING PROCEDURES, UNUSUAL FIRE OR EXPLOSION HAZARDS

Firefighters must wear self-contained breathing apparatus to protect against toxic and irritating vapors; full protective clothing should also be worn. Avoid water contamination in closed containers; carbon dioxide gas is evolved which can cause pressure build-up. Caution: Reaction between water and hot isocyanate can be vigorous.

TOXICITY DATA

LD50, ORAL (INGESTION)	LD50, DERMAL (SKIN CONTACT)	INHALATION (LC50)
>20 g/Kg (Rats)	>15.8 g/Kg (Rabbits)	~370 mg/M ³ (Rats-4 hrs.)
FISH, LC50 (LETHAL CONCENTRATION)	TLV (UNITS) (THRESHOLD LIMIT VALUE)	SKIN IRRITATION
500 mg/l	0.02 ppm (MDI)	Moderate. Skin sensitization possible in some people.
Daphnea Limnea, Invertebrates	EFFECTS TO LUNG	OTHER
EFFECTIVE TO EYE	Irritant to upper respiratory tract.	
Irritant		

EMERGENCY AND FIRST AID PROCEDURES, EFFECTS OF OVER EXPOSURE Primary route of exposure is via inhalation. Over exposure may lead to mucous membrane irritation, tightness of chest, respiratory tract

irritation, coughing, headache, shortness of breath. May lead to allergic sensitivity in some individuals resulting in asthma-like symptoms upon exposures below TLV. Sensitized persons should be removed from any further exposure. Persons with asthma-type conditions, or other chronic respiratory diseases should be excluded from working with MDI.

EYE CONTACT: Flush with water 15 minutes. Consult physician.

SKIN CONTACT: Wash area thoroughly with soap and water. Launder clothes before reuse.

INGESTION: Drink water to reduce corrosivity, consult physician.

INHALATION: Remove to uncontaminated area, administer oxygen if necessary. However, due to low vapor pressure, overexposure not expected under normal conditions unless material is heated or used in a poorly ventilated area.

REACTIVITY DATA

STABILITY Stable	CONDITIONS TO AVOID Avoid temperatures above 120°F or below 32°F
POLYMERIZATION May occur	CONDITIONS TO AVOID Contact with moisture and other materials which contain active hydrogen.
INCOMPATIBILITY (MATERIALS TO AVOID) Water, amines, strong bases, alcohols, surface-active materials.	
HAZARDOUS DECOMPOSITION PRODUCTS Oxides of carbon, oxides of nitrogen, traces of hydrogen cyanide.	

SPILL OR LEAK PROCEDURE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED	Spill should be covered with loose absorbent material (sawdust, vermiculite). Pour decontamination solution over spill area, allow to react at least 10 min., collect material in open containers and treat with additional decontamination solution, allow to stand 24-48 hrs. Wash area with decontamination solution. Respirator protection and ventilation recommended during spill clean-up. Decontamination Sol: 90% water, 8% conc. ammonia, 2% detergent.
WASTE DISPOSAL METHOD	Incinerate or dispose of in accordance with existing Federal, State, and Local environmental control regulations. See also "Recommendations for the Safe Use and Handling of Instapak® Foam-In-Place Chemicals."

SPECIAL PROTECTION DATA

RESPIRATOR TYPE	For short term emergency situations at concentrations below TLV cannister-type masks equipped for organic vapors are acceptable; however, supplied air in areas where concentration exceeds TLV, self-contained units preferred.	
EYE PROTECTION	Goggles and/or face shields	GLOVES Chemical resistant rubber or plastic
OTHER PROTECTIVE EQUIPMENT	Safety shower, eye wash station, decontamination solution, ventilation to maintain isocyanate vapors below TLV of 0.02 ppm.	

SPECIAL PRECAUTIONS & STORAGE DATA

STORAGE TEMPERATURE (OPTIMUM) Min. 20 F Max. 100 F	AVERAGE SHELF LIFE 6 months
SPECIAL SENSITIVITY (HEAT, LIGHT, MOISTURE) Reacts with moisture to produce carbon dioxide gas.	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Do not reseal containers unless it is certain that no moisture contamination has occurred. Do not breath vapors or allow skin contact.	

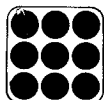
SHIPPING DATA

D.O.T. SHIPPING NAME N.A.	TECHNICAL SHIPPING NAME Polymeric Diphenylmethane Diisocyanate	
D.O.T. HAZARD CLASSIFICATION Non-Regulated	UN/NA NO. UN 2207	R.Q. N.A.
D.O.T. LABELS REQUIRED None	LABEL N.A.	T.S.C.A. STATUS Listed
REASON FOR ISSUE: Periodic Update	FRT. CLASS BULK: Isocyanate	FRT. CLASS PKG: Chemical NOI (Isocyanate) NMFC 60000
INITIATED BY: Charles T. Story	TITLE: Environ. Manager	APPROVED BY: TITLE: Dr. Mitchell Berger/Director, Chemical Opera.
DATE INITIATED: November 1985	DATE APPROVED: November 1985	

N.E. = NOT ESTABLISHED N.A. = NOT APPLICABLE A.I. = ACTIVE INGREDIENT

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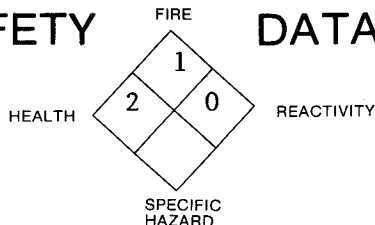
BOE-C6-0225245



Sealed Air Corporation

Old Sherman Trpk., Danbury, CT 06810, (203) 792-2360

MATERIAL SAFETY



DATA SHEET

DPM 6060

ISSUE DATE Apr. 1986

SUPERSEDES
ISSUE OF Nov. 1985

EMERGENCY TELEPHONE NO:
(203) 792-2360

CHEMTREC (For spill, leak, fire, exposure or accident) 1-800-424-9300

PRODUCT NAME

INSTAPAK®-40 COMPONENT "B"

CHEMICAL FAMILY

N.A.

CHEMICAL NAME & SYNONYMS

Polyurethane Resin

CHEMICAL FORMULA

N.A.

TRADE NAME & SYNONYMS

Polyol

HAZARDOUS INGREDIENTS

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS OR GASES	CAS #	%	CURRENT TLV
Trichloromonofluoromethane	75-69-4	15	1000 ppm
Diethanolamine	111-42-2	1.5	3 ppm

PHYSICAL DATA

APPEARANCE (SOLID, LIQUID, GAS) Liquid	MOLECULAR WEIGHT N.A.	MELT POINT Approx. 20°F	SPECIFIC GRAVITY 1.09 @ 25°C
VAPOR DENSITY (AIR=1) 4	COLOR Clear, Straw	BULK DENSITY 9.1 lbs./gal.	BOILING POINT Approx. 100°F
VAPOR PRESSURE 900 mmHg @ 100°F	SOLUBILITY (WATER) Soluble	ODOR Slight Flurorcarbon	% VOLATILE BY VOLUME 15

FIRE & EXPLOSION DATA

FLASH POINT °F (METHOD USED) Not Flammable	FLAMMABLE LIMIT LeI N.E. UeI N.E.	EXTINGUISHING MEDIA CO₂, Chemical foam, dry chemical, water
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SPECIAL FIRE FIGHTING PROCEDURES, UNUSUAL FIRE OR EXPLOSION HAZARDS

A self-contained breathing apparatus should be worn to protect against oxygen

deficient atmosphere and hazardous decomposition products. Over heating of con-

tainers can lead to rupture due to low boiling trichlorofluoromethane.

TOXICITY DATA

LD50, ORAL (INGESTION) N.E.	LD50, DERMAL (SKIN CONTACT) N.E.	INHALATION (LC50) N.E.
FISH, LC50 (LETHAL CONCENTRATION) N.E.	TLV (UNITS) (THRESHOLD LIMIT VALUE) N.E.	SKIN IRRITATION Repeated contact may be irritating.
EFFECTIVE TO EYE Irritant	EFFECTS TO LUNG May be irritating if hot.	OTHER

EMERGENCY AND FIRST AID PROCEDURES, EFFECTS OF OVER EXPOSURE

EYES: Flush thoroughly with water, consult physician.

SKIN: Wash thoroughly with soap and water. Launder clothes before reuse.

INHALATION: Remove to fresh air; administer oxygen if necessary; consult physician.

INGESTION: Consult a physician.

NOTE TO PHYSICIAN: No specific antidote, treat symptoms.

REACTIVITY DATA

STABILITY Stable	CONDITIONS TO AVOID Avoid vapor contact with open flame.
POLYMERIZATION Will not occur	CONDITIONS TO AVOID None
INCOMPATABILITY (MATERIALS TO AVOID) Isocyanates; avoid contact unless mixed at proper ratio.	
HAZARDOUS DECOMPOSITION PRODUCTS Oxides of carbon and nitrogen, hydrogen chloride and hydrogen flouride (corrisive).	

SPILL OR LEAK PROCEDURE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED Absorb on sweeping compound or other absorbent material. Provide sufficient ventilation to keep fluorocarbon vapor level below TLV of 1000 ppm.
WASTE DISPOSAL METHOD Incinerate or dispose of in accordance with Federal, State and Local environmental and control regulations. See also "Recommendations for the Safe Use and Handling of Instapak® Foam-In-Place Chemicals."

SPECIAL PROTECTION DATA

RESPIRATOR TYPE	
Cartridge respirator equipped for organic vapors if conditions require.	
EYE PROTECTION	GLOVES
Safety glasses and/or goggles	Chemical resistant rubber or plastic
OTHER PROTECTIVE EQUIPMENT	
Safety shower, eye wash station	

SPECIAL PRECAUTIONS & STORAGE DATA

STORAGE TEMPERATURE (OPTIMUM) Min. 20°F Max. 100°F	AVERAGE SHELF LIFE 12 months
SPECIAL SENSITIVITY (HEAT, LIGHT, MOISTURE) None	
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING Store in cool area. Containers above 80°F will be under pressure and must be opened with care.	

SHIPPING DATA

D.O.T. SHIPPING NAME N.A.	TECHNICAL SHIPPING NAME Poly (oxyalkylene) Polyol Mixture		
D.O.T. HAZARD CLASSIFICATION Non-regulated	UN/NA NO. N.A.	R.Q. N.A.	
D.O.T. LABELS REQUIRED None	LABEL N.A.	T.S.C.A. STATUS Listed	
REASON FOR ISSUE: Correction	FRT. CLASS BULK: Polypropylene Glycol	FRT. CLASS PKG: Polypropylene Glycol	
INITIATED BY: Charles T. Story	TITLE: Environ. Manager	APPROVED BY: Dr. Mitchell Berger/Dir., Chemical Opera.	TITLE:
DATE INITIATED: April 1986	DATE APPROVED: April 1986		

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